



12/15/03

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Dkt. No. 03818/1200029-US2

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of:

Dieter Soll

Serial No.: 10/661,399

Filed: September 12, 2003

For: GLUTRNA<sup>GLN</sup> AMIDOTRANSFERASE - A NOVEL ESSENTIAL  
TRANSLATIONAL COMPONENT  
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December 11, 2003

INFORMATION DISCLOSURE STATEMENT

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

This Information Disclosure Statement is submitted in accordance with 37 C.F.R. 1.97, 1.98, and it is requested that the information set forth in this statement and in the listed documents be considered during the pendency of the above-identified application, and any other application relying on the filing date of the above-identified application or cross-referencing it as a related application.

1. This IDS should be considered, in accordance with 37 C.F.R. 1.97, as it is filed:

(Check one of the boxes A-D)

- ☒ A. Within three months of the filing date of the above-identified national application or within three months of the entry into the national stage of the above-identified international application.
- ☐ B. before the mailing date of a first office action on the merits, or a first office action after filing a request for continued examination.
- ☐ C. after (A) and (B) above, but before the mailing date of a final rejection, a notice of allowance, or any other action that closes prosecution, and Applicants have made the necessary statement in box "i" below or paid the necessary fee in box "ii" below.

(check one of the boxes "i" and "ii" below:)

Docket No. 03818/1200029-US2

- ☐ i. Counsel states that, upon information and belief, each item of information listed herein was either (a) cited in a communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of this IDS; or (b) was not cited in a communication from a foreign patent office in a counterpart foreign application and, to the knowledge of undersigned after making reasonable inquiry, was not known to any individual designated in 1.56(c) more than three months prior to the filing of this IDS.
- ☐ ii. A check for the fee set forth in 1. 17(p), presently believed to be \$180, is enclosed.
- ☐ D. after (A), (B) and (C) above, but before payment of the issue fee: Counsel states that, upon information and belief, each item of information listed herein was either (i) cited in a communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of the IDS; or (ii) was not cited in a communication from a foreign patent office in a counterpart foreign application and, to the knowledge of the undersigned after making reasonable inquiry, was not known to any individual designated in 1.56(c) more than three months prior to the filing of this IDS.
- ☐ i. A check for the fee set forth in 1.17 (p), presently believed to be \$180, is enclosed.

2. In accordance with 37 C.F.R. 1.98, this IDS includes a list (e.g., form PTO-SB/08) of all patents, publications, or other information submitted for consideration by the office, either incorporated into this IDS or as an attachment hereto. A copy of each document listed is attached, except as explained below.

(check boxes A and/or B and fill in blanks, if appropriate.)

- ☐ A. Document(s) \_\_\_\_\_ is (are) deemed substantially cumulative to document(s) \_\_\_\_\_, and, in accordance with 1.98(c), only a copy of each of the latter documents is enclosed.
- ☒ B. Certain documents were previously cited by or submitted to the Office in the following prior applications, which are relied upon under 35 U.S.C. 120:

09/355,622, filed September 23, 1999.

Applicant Identifies these documents by attaching hereto copies of the forms PTO-892 and PTO-SB/08 from the files of the prior application(s) or a fresh PTO- SB/08 listing these documents, and request that they be considered and made of record in accordance with 1.98(d). Per 37 CFR 1.98(d), copies of these documents need not be filed in this application.

☐ 3. Document Nos. \_\_\_\_\_ are not in the English language. In accordance with 1.98(c), Applicant states:

- ☐ An English translation of each document (or of the pertinent portions thereof), or a copy of each corresponding English-language patent or application is enclosed.
- ☐ A concise explanation of the relevance of document(s) \_\_\_\_\_ is found in the attached search report (see MPEP § 609 A(3)x).
- ☐ A concise explanation of the relevance of document(s) \_\_\_\_\_ is set forth as follows: [Insert concise explanation of relevance]
- ☐ A concise explanation of the relevance of document(s) \_\_\_\_\_ can be found on pages \_\_\_\_\_ of the specification.
- ☐ A concise explanation of document(s) \_\_\_\_\_ can be found on the attached sheet.

☐ 4. No explanation of relevance is necessary for documents in the English language (see MPEP § 609 A(3)).

☐ 5. Other information being provided for the examiner's consideration follows:

6. In accordance with 37 C.F.R. 1.97(g) and (h), the filing of this IDS should not be construed as a representation that a search has been made or that information cited is, or is considered to be, material to patentability as defined in §1.56 (b), or that any cited document listed or attached is (or constitutes) prior art. Unless other-wise indicated, the date of publication indicated for an item is taken from the face of the item and Applicant reserves the right to prove that the date of publication is in fact different.

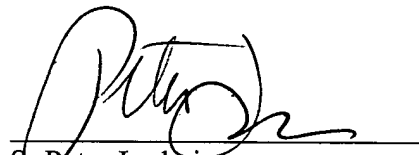
**CROSS REFERENCE UNDER 37 C.F.R. §1.78 TO RELATED APPLICATIONS**

Pursuant to 37 C.F.R. § 1.78, Applicant notes that the above-identified patent application may be related to the following U.S. Patent Applications:

(1) U.S. Patent Application Serial No \_\_\_\_\_, filed \_\_\_\_\_.

Early and favorable consideration is earnestly solicited.

Respectfully submitted,

  
 S. Peter Ludwig  
 Registration No. 25,351  
 Attorney for Applicant(s)

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PTO/SB/08a/b (08-03)

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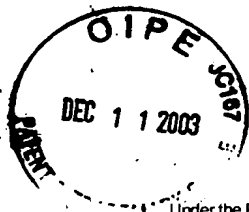
<b>Substitute for form 1449A/B/PTO</b>  <b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  (Use as many sheets as necessary)				<b>Complete if Known</b>	
				Application Number	10/661,399
				Filing Date	September 12, 2003
				First Named Inventor	Dieter Soll
				Art Unit	N/A
				Examiner Name	Not Yet Assigned
Sheet	1	of	2	Attorney Docket Number	03818/1200029-US2

U.S. PATENT DOCUMENTS					
Examiner Initials*	Cite No. <sup>1</sup>	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number-Kind Code <sup>2</sup> (if known)			
	AA**	US-6,136,560-B1	10-24-2000	Black et al.	
	AB**	US-6,150,340-B1	11-21-2000	Black et al.	
	AC**	US-6,171,838-B1	01-09-2001	Black	
	AD**	US-6,200,774-B1	03-13-2001	Black et al.	
	AE**	US-6,207,647-B1	03-27-2001	Black et al.	
	AF**	US-6,248,557-B1	06-19-2001	Black et al.	

FOREIGN PATENT DOCUMENTS						
Examiner Initials*	Cite No. <sup>1</sup>	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T <sup>6</sup>
		Country Code <sup>3</sup> -Number <sup>4</sup> -Kind Code <sup>5</sup> (if known)				
	BA**	EP-0 191 221-A1	08-20-1986			
	BB**	EP-0 786 519-A2	07-30-1997			
	BC**	EP-0 857 786-A1	08-12-1998			
	BD**	EP-0 863 207-A1	09-09-1998			
	BE**	EP-0 857 785-A1	08-12-1998			

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NON PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
	CA**	Curnow, AW et al. tRNA-dependent asparagine formation. Nature. 382(6592):589-590 (1996)	
	CB**	Curnow, AW et al. Glu-tRNA <sup>Glu</sup> amidotransferase: A novel heterotrimeric enzyme required for correct decoding of glutamine codons during translation. Proc. Natl. Acad. Sci. (USA) 94(22), pp. 11819-11826.	
	CC**	Curnow, AW et al. rRNA-dependent amino acid transformations. Nucleic Acids Symposium Series 36 (Symposium on RNA Biology, II, RNA: Tool and Target) 36:2-4 (1997).	
	CD**	Jahn, D. et al. Purification and Functional Characterization of the Glu-RNA <sup>Gln</sup> Amidotransferase from Chlamydomonas reinhardtii. J. Biol. Chem 265(14): 8059-8064. (1990)	
	CE**	Kim, SI et al. EMBL Accession No. U49790. Bacillus subtilis PET112-like protein gene, complete cds. Submitted (Feb. 22, 1996).	
	CF**	Schon, A. et al. Protein biosynthesis in organelles requires misaminoacylation of tRNA. Nature. 331(6152): 187-190. (1988)	
	CG**	Strauch, MA et al. Characterization of the Glutamyl-tRNA <sup>Gln</sup> -to-Glutaminyl-tRNA <sup>Gln</sup> Amidotransferase Reactin of Bacillus subtilis. J. Bacteriol., 170(2):916-920. (1988)	
	CH**	Tabata, S. EMBL Accession No. D90907. Synechocystis sp. PCC6803 complete genome. Submitted (June 28, 1996).	
	CI**	Wengender, PA et al. Identification of a PutP Proline Permease Gene Homolog from Staphylococcus aureus by Expression Cloning of the High-Affinity Proline Transport System in	
Examiner Signature			Date Considered



PTO/SB/08a/b (08-03)

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				Examiner Name	Not Yet Assigned
Sheet	2	of	2	Attorney Docket Number	03818/1200029-US2

		Escherichia coli. Appl. Env. Microbiol. 61(1):252-259. (1995).	
	CJ**	Wilcox, M et al. Transfer RNA As A Cofactor Coupling Amino Acid Synthesis with that of Protein, Proc. Natl. Acad. Sci. (USA). 61:229-236 (1968).	
	CK**	Wilcox, M. Gamma-glutamyl phosphate attached to glutamine-specific tRNA. A precursor of glutamyl-tRNA in Bacillus subtilis. Eur J. Biochem. 11(3):405-12 (1969).	
	CL**	Wilcox M. Gamma-phosphoryl ester of glu-tRNA-GLN as an intermediate in Bacillus subtilis glutamyl-tRNA synthesis. Cold Spring Harb. Symp. Quant. Biol. 34:521-528 (1969)	
	CM**	Curnow, A. W. et al., "Bacillus subtilis Glu-tRNA <sup>Gln</sup> amidotransferase subunits C (gatC), A (gatA) and B (gatB) genes complete cds." EMBL Accession No. AF008553, 18 November 1997.	
	CN**	Kos, T. et al., Abstract: "Nucleotide sequence of the Aspergillus niger trpC gene: structural relationship with analogous genes of other organisms," Curr. Genet. 13(2):137-144 (1988).	
	CO**	Walker, M.S., et al., Abstract: "Deletion Analysis of Domain Independence in the TRP1 Gene Product of Neurospora Crassa", Mol Gen Genet., 223(1):49-57 (1990).	
	CP**	Zalkin, H., "The Amidotransferases", Advances in Enzymology and Related Areas of Molecular Biology 66, A Meister, Ed., pp. 203-205 and 282-287 1993.	
	CQ**	Zalkin, H., "Glu-tRNA <sup>Gln</sup> amidotransferase" Methods in Enzymol. Vol. 13 Glutamate, Glutamine, Glutathione, and Related Compounds, A. Meister, Ed., 113:303-305 (1985).	
	CR	Kim, Sung-II, et al., "A Nuclear Genetic Lesion Affecting Saccharomyces cerevisiae Mitochondrial Translation Is Complemented by a Homologous Bacillus Gene", Journal of Bacteriology, Sept. 1997, Vol. 179, No. 17, pp. 5625-5627.	
	CS	Curnow, Alan W., et al., "Glutamyl-tRNA <sup>Gln</sup> amidotransferase in Deinococcus radiodurans may be confined to asparagine biosynthesis", Proc. Natl. Acad. Sci., USA Vol. 95, pp. 12838-12843, October 1998.	

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. \*\*CITE NO.: Those patent(s) or publication(s) which are marked with an double asterisk (\*\*) next to the Cite No. are not supplied because they were previously cited by or submitted to the Office in a prior application relied upon in this application for an earlier filing date under 35 U.S.C. 120.

<sup>1</sup>Applicant's unique citation designation number (optional). <sup>2</sup>Applicant is to place a check mark here if English language Translation is attached.

Examiner Signature		Date Considered	
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Application No. (if known): 40/661,399

Attorney Docket No.: 03818/1200029-US2

## Certificate of Express Mailing Under 37 CFR 1.10

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Information Disclosure Statement (4 pages)  
Form PTO SB/08 (2 pages)  
Two (2) documents